

ABSTRACT

The growth and yield of *Pleurotus florida* mushroom were evaluated in media with corn husk and wood sawdust substrates. Five formulations of substrates, namely 0%, 25%, 50%, 75%, and 100% of wood sawdust substituted with corn husk, were tested with 0% corn husk or 100% wood sawdust serving as the control. The total number of fruiting bodies, the number of effective fruiting bodies, the total fresh weight and dry weight of the mushroom, and biological efficiency were significantly increased with as low as 25% corn husk in the substrate, and they showed a significant increasing trend as the composition of corn husk in the substrate increased. Superior yield was produced by *P. florida* cultivated in 100% corn husk, where the total number of fruiting bodies, the number of effective fruiting bodies, the total fresh weight, and the total dry weight of the mushroom were 4.8 times, 5.4 times, 4.6 times, and 5.4 times greater than the control, respectively. The biological efficiency of *P. florida* increased gradually from 8.8% in the control to 51.37% in the 100% corn husk substrate. Therefore, corn husk could be exploited as a substitute or alternative substrate to wood sawdust for more sustainable production of *P. florida*.